An Integrative Literature Review of Knowledge Sharing through Cultural Lenses

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This paper presents an integrative review of literature on cultural dimensions that have been suggested as facilitative and inhibitive to knowledge sharing in organizations. Content analysis was conducted on articles related to national, organizational and professional culture and knowledge sharing process. Based on a review of existing literature in this area, this paper presents a conceptual framework that identifies cultural factors that significantly influence knowledge sharing process.

Keywords: Knowledge Management, Culture, Learning

As knowledge has become the most valuable resource in this knowledge-intensive economy, organizations are striving to capitalize on their knowledge assets through effective knowledge management strategies and practices. Making knowledge available to the right people at the right time is crucial for building and sustaining an organization's competencies (Alazmi & Zairi, 2003). Despite substantial consensus regarding the strategic value of knowledge, the actual processes of knowledge creation, transfer, and retention in organizations still remain to be fully elucidated (Argote, 1999; Argote & Ingram, 2000). Considering that individual knowledge and expertise are assets that can provide an edge to organizations (Chermack, Provo, & Danielson, 2005), a greater understanding is necessary of how individuals create, share, and use knowledge within the organization along with what factors influence each of the process.

The field of knowledge management has traditionally been dominated by information technology and technology-driven perspectives (Davenport, De Long, & Beers, 1998; Gourlay, 2001). However, this turned out to be an ineffective approach to knowledge management. It has been criticized that most of the failure was due to overemphasis on building technology infrastructures and lack of attention to human factors such as the social, cultural, and motivational issues (Garavelli, Gorgoglione, & Scozzi, 2002; Malhotra, 2002). To address this lack of attention to people perspectives, there is an increasing recognition of the key to successfully managing knowledge by focusing on social and cultural factors (Davenport et al., 1998; McDermott, 1999).

Problem Statement

Today's organizations, from a cultural perspective, are multi-cultural entities in that organizations are composed of employees with multi-ethnicity and multi-professional cultures. Cultural factors have been seen to shape how actors behave in cross-cultural business relationships and networks involving people from several ethnic or national cultures (Bhagat, Kedia, Harveston, & Triandis, 2002; De Long & Fahey, 2000). Culture, however, is a very complex and "nested" phenomenon (Swidler, 1986) with several different layers in some specific contexts (Möller & Svahn, 2004). Previous research also suggests that national culture and cross-cultural distance may influence knowledge processes, and invites further examination. Simonin (1999) concludes from his study that the cultural distance between firms increases the difficulty of performing knowledge-sharing processes successfully. Studies have found that cultural differences impact information flows, knowledge management processes, and knowledge sharing between international alliance partners (Lyles & Salk, 1996; Mowery et al., 1996; Tiemessen et al., 1997). However, most of research has been conducted within each of these three cultural dimensions, namely, national culture, organizational culture and professional culture, separately and very little research has focused on where and how they intersect. Also, given the complex and multifaceted characteristics of layers of culture, it is not surprising to find a lack of synthesis on how cultural dynamics affect knowledge sharing in organizations either conceptually or empirically. Extant studies on the relationship of culture and knowledge sharing have examined on either national or organizational cultural impact on knowledge sharing processes. These rendered this attempt to integrate the findings challenging. Despite considerable attention and literature in knowledge management, research is greatly fragmented surrounding the topic of the linkage of knowledge sharing and cultural factors. This lack of holistic approach could also yield challenges for HRD professionals in prescribing effective interventions to maximize knowledge management effectiveness. In order to take a holistic perspective in understanding the dynamics and to apply it for organizations, an integrative body of knowledge on the connection between knowledge sharing and

cultural factors is called for. This paper is an attempt to integrate previous findings on the linkage between knowledge sharing practices and cultural factors and is expected to add a piece to better understand the knowledge puzzle in organizations.

Purpose of the Study and Research Question

The purpose of this paper is to identify cultural factors that have been suggested as influential to knowledge sharing process in organizations from the extant literature base. It also intends to present an integrative framework of knowledge sharing process through diverse cultural angles. The overarching research questions are: what cultural variables have been identified as influential to individuals' knowledge sharing process in the literature? What subfactors of each cultural dimensions have been found to be influential to knowledge sharing at individual levels?

Method

The method used to inform the literature search involved accessing scholarly literature available through electronic databases, including the ERIC, ABI Inform, and Business Source Premiere. The following keywords were used to guide searches on the databases: knowledge sharing, knowledge management, knowledge creation, organizational culture, national culture, and professional culture. In order to make sure that the search results included all the possible combinations of keywords, alternative terms such as knowledge transfer were also used. Second, three layers of cultural factors that facilitate or inhibit knowledge sharing process were identified from the articles. Finally, a conceptual framework which attempts to integrate three cultural factors and their sub-factors influencing knowledge sharing was developed.

Literature Review

Individualized knowledge and culture

For an organization to gain the advantage of strategic knowledge management, the organization needs to capitalize on individual knowledge and turn as much of it as possible into organizational knowledge (Ford & Chan, 2003). Individuals in organizations have created and shared knowledge and therefore knowledge sharing was considered to be a natural function of workplaces, an activity that took place automatically (Chakravarthy, Zaheer, & Zaheer, 1999). However, the term "knowledge" and its value are differently recognized to different people in different domains (Soule, 2003) and it is cognitively reconstituted in some specific contexts.

Nonaka (1994) defines knowledge as "justified true belief" or according to Nonaka and Takeuchi (1995), knowledge is "a dynamic human process of justifying personal belief toward the truth" (p58). Davenport and Prusak (1998) conferred knowledge a working definition: "a fluid mix of framed experiences, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information" (p. 5). The most popular division is putting knowledge into two categories, namely, explicit and tacit knowledge (Nonaka & Takeuchi, 1995). From a variety of knowledge definitions, we can see that knowledge is contextual and situated within different environments; therefore, in order to study knowledge sharing, it is important to identify what is considered as knowledge within a specific context (Brown & Duguid, 2001; Ipe, 2003).

Research has shown that shared context or common ground is important for knowledge sharing, especially tacit knowledge sharing (Augier, Shariq, & Vendelo, 2001). According to Karlsen and Gottschalk (2004), culture plays a critical role in knowledge sharing process in that it shapes assumptions about what knowledge is worth exchanging; it defines relationships between individual and organizational knowledge; it creates the context for social interaction that determines how knowledge will be shared in particular situations; and it shapes the processes by which new knowledge is created, legitimated, and distributed in organizations. Interaction and collaboration among employees is important when attempting to transmit tacit knowledge between individuals or convert tacit knowledge into explicit knowledge, thereby transforming it from the individual to the organizational level (Gold, Malhorta, & Segars, 2001). Without the benefit of a culture that recognizes, encourages, and rewards knowledge sharing activities, consistent performance of knowledge management activities will not occur.

According to Schein (1985), the construction of culture has resulted from the interaction of people and their environment. In essence, the content of culture consists of a set of underlying norms and values of behavior, shared by a group of people. Also, culture presents itself on different levels: at the highest level is the culture of a national or regional society, which can be called national culture; the way in which shared attitudes, values, goals, and practices are expressed within a specific organization is described as corporate or organizational culture; people within the same occupation will tend to share certain professional and ethical orientations, which form a professional culture. All of these layers of culture can jointly impact an individual's behavior in the knowledge sharing context

(Möller & Svahn, 2004; Trompenaars, 1994). Although knowledge management literature thus far has mainly focused on organizational culture, this paper attempts to extend the focus to other dimensions of culture too, national culture and professional culture in an integrative manner. Next, each of these three layers of culture is discussed as well as how it may impact an individual's knowledge sharing.

Knowledge Sharing Culture

As organizations grow in size, geographical scope, and complexity, knowledge sharing is crucial because it helps organizations promote best practices and reduce redundant learning cycles (Hanse, 2002; McDermott & O'Dell, 2001). Also, there is growing realization that knowledge sharing is critical to knowledge creation, organizational learning, and performance achievement (Bartol & Srivastava, 2002).

A popular classification of knowledge processes of Davenport and Prusak's (1998) is found within the literature which captures the complexity of knowledge and aligns with people's understanding in business settings. There are essentially four knowledge processes in this classification; knowledge generation, knowledge codification, knowledge sharing, and knowledge application. Other researchers may use different terminologies, but their classification is pretty similar with these four processes (Feng, Chen & Liou, 2005). Taking a closer look at the four processes, knowledge sharing can enhance knowledge creation which is a social process involving sharing tacit knowledge (Nonaka & Takeuchi, 1995). In another words, the purpose of knowledge sharing is knowledge generation that helps sustain organizations in a competitive market. Therefore, it is obvious that all four processes in knowledge management are highly related and knowledge sharing is the core part. Knowledge sharing is the process where individuals mutually exchange their (implicit and explicit) knowledge and jointly create new knowledge. A number of scholars have defined knowledge sharing; for instance, Ardichvili and his colleagues (2003) note that knowledge sharing consists of both the supply of new knowledge and the demand for new knowledge. Grotenhuis and Weggeman (2002) distinguishes between a "knowledge source" and a "knowledge receiver" in knowledge sharing process. Without the capacity for sharing knowledge, no business network can utilize the specialized resources and capabilities of its members, nor can it co-produce new knowledge. Thus, knowledge sharing is a critical factor in terms of its relative competitiveness (Bhagat et al., 2002). Besides, although these four processes exist distinctively in theory, they are interwoven in real practice, for instance, knowledge generation happens during knowledge sharing (Nonaka & Takeuki, 1995). Therefore, it is reasonable to say that knowledge sharing captures the main organizational activities toward managing knowledge efficiently. On the other hand, according to Ford and Chan (2003), knowledge sharing is one of the most challenging processes for a knowledge based enterprise due to employees' possible reluctance to share what they know. Given the importance and challenges of knowledge sharing, this paper attempts to identify the major cultural dimensions on an individual's knowledge sharing process in organizations.

Cultural Dimensions and Knowledge Sharing

Cultures seem to play a formative role in the understanding of what constitutes knowledge and what knowledge values. With better understanding of the key cultural factors which determine how knowledge is defined, generated, and shared, better knowledge management strategies will be likely to be predicted upon. This paper thus takes three dimensions of cultural angles as influential contexts in knowledge sharing process for further discussions.

National Culture and Knowledge Sharing. National culture is defined as 'the collective programming of the mind which distinguishes the members of one human group from another' (Hofstede, 1980, p 25). The collective programming is based on values; in other words, members of a culture will have similar sets of preferences built into how they view the world (Hofstede, 1980). There are a number of theories and models that have informed crosscultural research, based on dichotomies or continuums of values, such as: individualism-collectivism (Hofstede, 1980); high and low context (Hall, 1976); monochromic-polychromic (Lewis, 1996). These value-based models predict individual and group attitudes and behaviors based on national culture. Among them, Hofstede's five classic dimensions that have been used widely in cross-cultural studies are: power distance, uncertainty avoidance, individualism versus collectivism, masculinity versus femininity and long-term versus short-term orientation (Kurman, 2003). Some researchers have used this model to account for knowledge process and found that the cultural dimensions of the Hofstede model might play a role in the knowledge management processes (Ford & Chan, 2003; Rossen, 2002). Despite the importance of cross-cultural considerations in knowledge sharing, the literature is almost silent in its cross-cultural dimensions (Bhagat, et al., 2002; Glisband & Holden, 2003; Holden, 2002) and only very few recent studies have explicitly concentrated on the discussion of national cultural factors that influence knowledge sharing (Chow, et al., 2000; Ford & Chan, 2003; Hutchings & Michailova, 2004). Bhagat and his colleagues (2002) propose a theoretical framework for understanding the significance of four transacting cultural patterns, defined in terms of the dimensions of individualism-collectivism and verticalness-horizontalness, for their

potential in moderating the effectiveness of cross-border transfer of organizational knowledge. Chow, Deng and Ho (2000) studied the openness of knowledge sharing among Chinese and Americans. They found that collectivism and face did have influence on knowledge sharing. Ford and Chan (2003) conducted a case study in a Japanese manufacturing subsidiary in the western U.S. and their research results indicate that nationality predicts cross-cultural differences. In their recent study, Ardichvili and his colleagues (2005) found that the issue of face was not as important in China as literature indicates. By studying group support system in both western culture and Asian culture, Reinig and Mejias (2002) found that the influence of national culture was not quite predictable. Also, some of the widely accepted frameworks that have informed cross-cultural research, including the area of knowledge sharing have been criticized as too reliant on simplistic categorical description that ignores differentiation within cultures and on dichotomies or continuums of values, such as Hofstede's individualism-collectivism dimension and Hall's high-low context distinction (Pauleen & Wu, 2004). Although "cross-cultural" is a popular word nowadays, rather than labeling employees from different countries with the cultural stereotypes of their nations, we need to know whether and how these cultural differences make them behave differently under a specific context in knowledge sharing environments.

Organizational Culture and Knowledge Sharing. According to Buellens, Kreitner and Kinicki (2001), organizational culture is, in effect, a byproduct of national or societal culture. They assert that culture influences organizational behavior in two ways: employees bring their individual societal cultures in the form of customs and language, and organizational culture in turn affects the values, attitudes, assumptions, and expectations of an individual. As a large amount of literature has discussed the importance of organizational culture for knowledge sharing, organizational culture has been shown to significantly promote and hinder knowledge management processes (Gold et. al., 2001; Gupta & Govindarajan, 2000; Inkpen & Dinur, 1998; Davenport & Prusak, 1998). De Long and Fahey (2000) argue that organizational culture is increasingly recognized as a major barrier to leveraging intellectual assets. They identify three ways in which organizational culture influences knowledge sharing. First, organizational culture shapes assumptions about what knowledge is and which knowledge is worth managing. For example, an advertising agency may value human creative knowledge, while an auto parts distributor may give priority to more structured knowledge that is embedded in supply-chain processes. Second, culture defines the relationships between individual and organizational knowledge, determining who is expected to control specific knowledge, as well as who must share it and who can hoard it. This is about the ownership of knowledge. Empirical studies do show that if organizations treat knowledge as a private good, owned either by the organization or by organizational members, employee will be reluctant to share knowledge (Wasko & Faraj, 2000). However, if employees regard knowledge as a public good belonging to the whole organization, they will be willing to share it (Ardichvili, et al, 2002). Third, culture creates the context for social interaction that determines how knowledge will be used in particular situations. Trust, care and competition are the most frequently mentioned factors in extant literature. Trust is critical in knowledge sharing because not only knowledge givers need trust to share what they know, but knowledge receivers need trust to believe in the good intentions of knowledge givers to support them (Von Krogh, 1998; Zheng, 2005). The importance of trust is supported by many other studies (Connelly & Kelloway. 2000; Ardichvili et al., 2003; Politis, 2003). In Connelly and Kelloway's (2000) study, respondents said that they would only be willing to share knowledge in contexts where they trusted the recipients of the knowledge. Ardichvili and his colleagues (2003) pointed out the importance of both knowledge-based trust and institution-based trust in knowledge sharing. In terms of care or empathy, Von Krogh (1998) proposed a framework to show how empathy among organization members promotes effective knowledge sharing. Competition is considered a disincentive (Hinds & Pfeffer, 2003) and concern about job-security will prevent people from sharing knowledge, especially for those at lower level positions (Ardichvili, et al., 2005; De Long & Fahey, 2000; Orlikowski, 2000). From these three aspects, it is clear that organizational culture impacts organizational members' perception and behavior of knowledge sharing. If the organizational culture favors knowledge sharing, we can expect that employees will be more willing to share knowledge.

Professional Culture and Knowledge Sharing. Cultures are not homogenous across an organization (McDermott & O'Dell, 2001). Within organizations, there are also subcultures that are characterized by a distinct set of values, norms and practices, often resulting in their members valuing knowledge differently from other groups within the same organization (Pentland, 1995). According to Wever (1990), many employees do not feel loyal to the company any more but to their profession, their own outline of their profession and their professional code of ethics. The role of professional culture has been studied in many areas, such as information seeking behavior, technology use and business negotiation (Sheer & Chen, 2003). However, little study has been found that explicitly address whether and how professional culture influences knowledge sharing behavior.

Researchers lately have noticed the importance of professional culture in knowledge sharing context from their empirical studies. It is found that same working experience between group members is more important than same

cultural background in determining people's attitude towards knowledge sharing (Ford & Chan, 2003; Zhang et al., 2005). Studies also found that the recurrent and situated actions are related to the job characteristics of professional groups, and job function is also related to cognitive style of work in specific professions (Friedman, 2005; Taylor, 2004). Taking an example from sales professional, sales people deal with customers a lot in fields and so they may not have much time to sit in front of computers, while software engineers use computers a lot. Since software engineers usually work in teams to accomplish tasks, they are more used to knowledge sharing and are willing to share (Friedman, 2005). Most of researchers so far, however, limited their study in one professional group in order to control other variables by situating a study in a subsidiary instead of the whole company or by confining subjects as one specific professional group (Ford & Chan, 2003; Taylor, 2004). As cognitive style is related to how people perceive values of knowledge and use it, different cognitive styles established from different professional norms and practices are in need of consideration in the process of knowledge sharing.

An Integrative Conceptual Framework of Knowledge Sharing and Three Cultural Lenses

This paper suggests that not only should culture be an element in the understanding of knowledge sharing process but that there are complex relationships between the different cultural contexts and the way in which they relate and inter-relate to affect knowledge sharing behaviors, strategies and processes in organizations. Based upon the review of these related but disparate literatures, a conceptual framework of knowledge sharing through three cultural lenses is suggested. Two dimensions are suggested here in order to have an integrative understanding of knowledge sharing through multi-cultural lenses. Given that knowledge sharing is socio-culturally bound practice, culture needs to be considered as the major framework in this holistic picture of knowledge sharing. Another dimension is related to the way of knowledge flows in organizations, which is based on a communication process among parties for the supply and demand of knowledge.

The cultural dimension includes three sub-dimensions- national, organizational, and professional culture surrounding an individual, and the factors of each sub-dimension were identified from the literature review of the extant research. First, national cultural factors that affect knowledge sharing in organizations have been found to be including orientation to knowledge, power distance, and collectivistic characteristics such as saving face (Ford & Chan, 2003; Hutchings & Michailova, 2004; Kurman, 2003). The second cultural sub-dimension that influence on knowledge sharing is organizational culture which includes norms and practices, assumptions of values of knowledge, ownership of knowledge, and social interaction in context such as trust, care, and competition (Ardichvili et. al., 2003; Gupta & Govindarajan, 2000; Inkpen & Dinur, 1998; Simonin 1999). The last dimension which has been overlooked in many literature is professional culture, counting same cognitive style which comes from same working experiences, practices, and recurrent and situated actions related to job characteristics and thus building similar cognitive styles and values to job functioning (Pauleen & Wu, 2004; Taylor, 2004). It determines the value of knowledge, what to share and what not to share among individuals in a particular profession.

The second dimension of the framework concerns about the knowledge flows under the assumption that knowledge sharing is basically a communication process through diverse channels between two parties who supply and demand for knowledge. Both sides of the parties are involved in reciprocal knowledge sharing and generation process by acquiring, sharing, generating, and applying knowledge (Oldenakamp, 2001; Grotenhuis & Weggeman, 2002). Given that knowledge sharing process is based on socially shared cognition and individuals send and receive knowledge using various communication channels, it is very similar to basic communication process with components of sender, receiver, and channels (Osgood & Schramm, 1954; Shannon & Weaver, 1947, as cited in Underwood, 2003). Also, inflows and outflows of knowledge among individuals are mediated by channels they utilize to communicate as well as by cultures surrounding them. The channels used in these communication processes could include both formal channels such as purposive learning, KM systems, and training programs, and informal channels, for example, social network, mentoring, and coaching (Bartol & Srivastava, 2002; Ipe, 2003).

Taking a closer look at the culture of an individual embodies within these contexts, since individual employees bring their own national and professional cultural background to the workplace, the culture of each individual interactively recreates his or her own new culture in organizations. In other words, the converged and reconstituted culture in their mindset affects the knowledge sharing behaviors and then individuals continue to modify and create knowledge through the reciprocal communications. Receiving knowledge from others stimulates a reciprocal flow of knowledge in the direction of the sender both horizontally and vertically in organizations (Hall, 2001; Schulz, 2001). Thus, by the non-linear but iterative process of knowledge sharing among individuals, individual employees continuously develop their new cognitive styles of culture in knowledge sharing. Thus, these factors are interrelated and interact with each other influencing the other in a nonlinear fashion on knowledge flows. A conceptual model of knowledge sharing which summarizes the above discussion is suggested in Figure 1. This knowledge sharing

framework among individuals through three cultural lenses is pictured on the basics of a communication process which describes the reciprocal relationship of two or more parties of supplying and demanding knowledge.

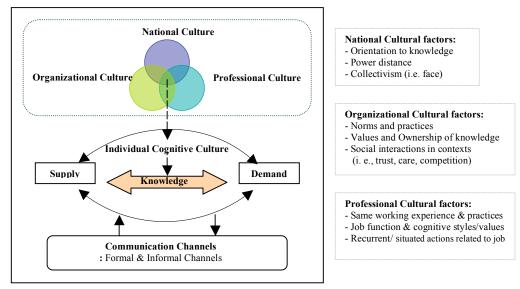


Figure 1. A Conceptual Framework for the Knowledge Sharing through Cultural Lenses (FKSC)

Limitations of the Study

A limitation of this review is acknowledged as the few number of articles that explicitly uncovered the relationship of professional culture and knowledge sharing comparing to the literature regarding organizational culture and knowledge management. This few numbers of articles is also indicative of an area that is lacking attention in the scholarly realm. Another limitation is recognized in that a wide range of literature regarding communication channels has not been incorporated into this article. Given the intent of presenting cultural dimensions that relate to overall knowledge sharing process, this article has not incorporated the general communication channels literature. It is certain that these two bodies of knowledge are related and while the interaction of these areas should be examined in future studies; it is beyond the scope of this article to do so.

Conclusion and Implications for HRD

It is clear that knowledge sharing in organizations is a complex process that is value laden and driven by diverse factors such as different dimensions of culture and communication channels within organizations. As knowledge is always situated within a particular context, it is natural that cultures within the context affect the way of sharing, creation, and use of knowledge. This paper attempted to provide a holistic perspective of cultural dimensions in the context of knowledge sharing, and three categories of cultural factors, their interactive nature and co-existence have been discussed.

This paper contributes to human resource development (HRD) in several ways. First, the suggested conceptual framework sheds lights on further understanding of knowledge sharing process by recognizing the three cultural dimensions together into the attention of HRD. It is true that, as an emerging subject area, knowledge management studies have been largely confined to examining organizational culture in isolation in the HRD field. Considering that HRD professionals usually have vital knowledge of employees in their organizations, a more careful and closer look at professional culture within organizations will enable them to take a more active role in knowledge management practices. Moreover, by identifying a knowledge-friendly milieu that incorporates a combination of different cultural dimensions and its sub-factors, this study maps out the holistic picture that can be conducive to knowledge and learning in organizations.

Although this study attempted to show an integrative perspective of knowledge sharing process, the limitations of the study offer several future directions for research in this area. First of all, further research is needed to empirically examine all of three cultural dimensions to detect possible interactions and the saliency of particular cultural factors in particular contexts. Also, it is needed to identify which sub-factors of each culture influence the most on knowledge sharing process and behaviors when communicating with either formal or informal channel. Despite the increasing recognition that a key aspect of knowledge sharing is facilitating communication between

people (Hildreth & Kimble, 2002), very little research has been conducted on extra organizational knowledge sharing within broad, professional-oriented groups of people. Thus, the third dimension of culture, professional culture, its impact on knowledge sharing needs to be identified across diverse industries as well as different professions. HRD professionals could facilitate knowledge sharing within or across diverse professions by suggesting an environment of structured informality, namely, communities of practices. Also, another area of research in need is virtual knowledge sharing process and behaviors which mainly occurs in online space with the use of information and communication technologies. An appropriate theory base along with empirical studies about this prevalent phenomenon is called for- not only about the usage of technology but also how social and cultural factors emerges and influence knowledge sharing process in virtual spaces. Finally, according to Bhatt (1998), the study of knowledge in organizations is still a relatively new area for research and lacks a coherent theoretical foundation. Given that knowledge sharing takes place in socially interactive environment, a theory that illuminates the interrelations of influencing factors may advance understanding of the culture-knowledge linkage in organizations. Thus, in-depth investigation of how individuals use their cultural intelligence to share knowledge using formal and informal channels in organizations is very much in need. This will help HRD practitioners and scholars become more informed about knowledge sharing occurring in organizations.

References:

- Alazmi, M. & Zairi, M. (2003). Knowledge management critical success factors. *Total Quality Management & Business Excellence*, 14(2), 199-205.
- Ardichvili, A. Maurer, M., Li, W., Wentling, T.& Stuedemann, R.(2005). Knowledge sharing through online communities of practice: The impact of cultural variations. *Proceedings of Academy of Human Resource Development*, 685-692.
- Ardichvili, A., Page, V. & Wentling, T. (2003). Motivation and barriers to participation in virtual knowledge-sharing communities of practice. *Journal of Knowledge Management*, 7(1), 64-77.
- Argote, P., & Ingram. (2000). Knowledge transfer in organizations: A basis for competitive advantage in firms. *Organizatoinal Behavior Human Decision Processes*, 82(3), 150-169.
- Augier, M., Shariq, S. Z. & Vendelo, M. T. (2001). Understanding context: Its emergence, transformation and role in tacit knowledge sharing. *Journal of Knowledge Management*, 5 (2), 125-136.
- Bhatt, G. D. (1998). Managing knowledge through people. Knowledge and Process Management, 5(3), 165-171.
- Bhagat, R., Kedia, B., Harveston, P. & Triandis, H. (2002). Cultural variations in the cross-border transfer of organizational knowledge: an integrative framework. *Academy of Management Review*, 27(2), 204-221.
- Bartol, K. M., & Srivastava, A. (2002). Encouraging knowledge sharing: The role of organizational reward systems. *Journal of Leadership Organizational Studies*, 9(1), 64-77.
- Brown, J., & Duguid, P. (2001). Knowledge and organization: A social-practice perspective. *Organization Science*, 12(2), 198-. Chakravarthy, B. S., Zaheer, A., & Zaheer, S. (1999). Knowledge sharing in organizations: a field study, Working Paper, Strategic Management Research Center, University of Minnesota.
- Chermack, T.J., Provo, J., Danielson, M. (2005). Executing organization strategy: A literature review and research agenda. *Proceedings of Academy of Human Resource Development Conference*.
- Connelly, C. & Kelloway, K. (2000). Predictors of Knowledge Sharing in Organizations, Thesis for Queen's School of Business, *Queen's University*, Kingston, ON.
- Davenport, E. & Hall, H. (2002). Organizational Knowledge and Communities of Practice. *Annual Review of Information Science and Technology*, 36, 171-227.
- Davenport, T. H., & Prusak, L.(1998) Working Knowledge: How Organizations Manage What they Know. Harvard Business School Press.
- Davenport, T. DeLong, D., & Beers, M.(1998). Successful knowledge management. *Sloan Management Review*,39(2),43-7. De Long, D. W. & Fahey, L. (2000). Diagnosing cultural barriers to knowledge management. *Academy of Management Executive*, 14(4), 113-127.
- Feng, K., Chen, E. T., & Liou, W. (2005). Implementation of knowledge management systems and firm performance: An empirical investigation. *Journal of Computer Information Systems*, 45(2), 92-104.
- Ford, D.P. & Chan, Y.E. (2003). Knowledge sharing in a multi-cultural setting: A case study. *Knowledge Management Research and Practice*, 1(1), July, 11-27.
- Garavelli, A., Gorgoglione, M., & Scozzi, B.(2002). Managing knowledge transfer by knowledge technologies. *Technovation 22(5), 296-321*.
- Glisband, M. & Holden, N. (2003). Contextual Constraints in Knowledge Management Theory: The Cultural Embeddedness of Nonaka's Knowledge-creating Company. *Knowledge & Process Management*, 10(1), 29-36.
- Gold, A. H., Malhotra. A., & Segars, A. H. (2001). Knowledge management: An organizational perspective. Journal of Management Information Systems, 18(1), 185-214.

- Gourlay, S. (2001). Knowledge management and HRD. Human Resource Development International, 4(1), 27-46.
- Grotenhuis, F. & Weggeman, M. (2002). Knowledge Management in International Mergers. *Knowledge and Process Management*. 9(2), 83-89.
- Gupta, A., & Govindarajan, V. (2000). Knowledge Flows within Multinational Corporations, *Strategic Management Journal*, 21(4), 473–496.
- Hildreth, P., & Kimble, C. (2002). The duality of knowledge. Information Research, 8(1), 13-29.
- Hinds, J., & Pfeffer, J.(2003). Why organizations don't "know what they know": cognitive and motivational factors affecting transfer of expertise. In Ackerman, Pipek, &Wulf.(Eds.) Sharing expertise: beyond knowledge management.
- Hofstede, G. H. (1984). National cultures and corporate cultures. In L. Samovar & R. Porter (Eds.), *Communication Between Cultures*. Belmont.
- Holden, N. (2002). Cross-cultural management: a knowledge management perspective. Financial Times: Harlow.
- Hult, G. T. (2003). An Integration of Thoughts on Knowledge Management. Decision Sciences, 34(2), 189-195.
- Hutchings, K. & Michailova, S. (2004). Facilitating knowledge sharing in Russian and Chinese subsidiaries: the role of personal networks and group membership. *Journal of Knowledge Management*. 8(2), 84-94.
- Inkpen, A., Dinur, A.(1998). Knowledge management and international joint ventures. *Organization Science*, 9(4), 45468.
- Ipe, M.(2003).Knowledge Sharing on Organizations: A Conceptual Framework. *Human Resource Development Review*, 2(4), 337-Janz, B. D., & Prasarnphanich, P. (2003). Understanding the Antecedents of Effective Knowledge Management: The Importance of a Knowledge-Centered Culture. *Decision Sciences*. 34(2), 351-384.
- Karlsen, J.T.& Gottschalk, P.(2004). Factors Affecting Knowledge Transfer in IT Projects. *Engineering Management Journal*, 16(1), 3-10.
- Kurman, J. (2003). Why is self-enhancement low in certain collectivist cultures? An Investigation of Two Competing Explanations. *Journal of Cross-Cultural Psychology*, *34*, 496-510.
- McDermott, R.(1999). Learning across teams: The role of communities of practice in teams. *Knowledge Management Review*, 7(3).
- Möller, K. K. & Svahn, S. (2004). Crossing East-West boundaries: Knowledge sharing in intercultural business networks. *Industrial Marketing Management*, 33(3), 219-228.
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. Organization Science, 5, 14-37.
- Nonaka, I. & Takeuchi, H. (1995). The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation.
- Oldenkamp, J. H. (2001). Limitations of managing knowledge sharing. In: D. Remenyi (Ed.), *Proceedings of the Second European Conference on Knowledge Management*, Bled, Slovenia, 411-418.
- Orlikowski, W. J. (2000). Using technology and constituting structures: A practice lens for studying technology in organizations. *Organization Science*, 11(4), 404-428.
- Pauleen, D. J. & Wu, L. (2004). Knowledge management through a cultural looking glass. 12th Annual Cross-Cultural Research in Information Systems Meeting, Washington D.C.
- Politis, J. D. (2003). The connection between trust and knowledge management: what are its implications for team performance. *Journal of Knowledge Management*, 7(5), 55-66.
- Reinig, B. A. & Mejias, R. J. (2002). An investigation of the influence of national culture and group support systems on group processes and outcomes. Proceedings of the *36th International Conference on System Science*.
- Schultz, M. (2001). The uncertain relevance of newness: Organizational learning and knowledge flows. *Academy of Management Journal*, 44(4), 661-681.
- Simonin, B. L. (1999). Transfer of marketing know-how in international strategic alliances: An empirical investigation of the role and antecedents of knowledge ambiguity. *Journal of International Business Studies*, 30 (3), 463-490.
- Soule, D. L. (2003). Bridging knowledge gaps: knowledge sharing and learning practices in virtual development teams. Dissertation Abstracts International, 64, (UMI No. 3086702).
- Straub, D., Limayem, M. & Karahanna-Evaristo, E. (1995). Measuring system usage: Implications for IS theory testing. *Management Science*, 41 (8), 1328-1342.
- Taylor, W. (2004), Computer-mediated knowledge sharing and individual user differences: an exploratory study, *European Journal of Information Systems*, 13(1), 52-64.
- Trompenaars, F. (1994). Riding the Waves of Culture: Understanding Diversity in Global Business. Irwin Pub. IL.
- Von Krogh, G. (1998). Care in knowledge creation. California Management Review, 40(3), 133-153.
- Zheng, W. (2005). An integrative literature review of organizational cultural factors that facilitate knowledge management: Implications for HRD. *Proceedings of Academy of Human Resource Development*, Colorado, 497-504.
- Zhu, Z. (2004). Knowledge management: towards a universal concept or cross-cultural context? *Knowledge Management Research & Practice*, 2, 67-79.